BULLETIN

October 16, 1992 **BROOKHAVEN NATIONAL LABORATORY**

DNI Lecture:

Assessing Risk Realistically

Nuclear or chemical, man-made or natural — contaminated areas are a cause of great concern for the public and for the U.S. Department of Energy (DOE).

But, as concern over past contamination of DOE facilities has risen, so have the costs of cleaning up the environment. For example, remediating the environmental contamination at DOE facilities was estimated originally at \$160 billion. But estimates of the cost are already up to \$360 billion - and public funds are not limitless.

Such a situation raises questions about priorities: Is one type of contamination potentially more dangerous to human health than another? Should more funds be directed to one area, reducing funding elsewhere? How can the health risk associated with contamination be assessed?

These questions and others prompt the presentation of "Realistic Risk Assessment for Remediation at DOE," the 281st Brookhaven Lecture, which will be given by Senior Scientist Leonard Hamilton, on Thursday, October 22, at 4 p.m. in Berkner Hall.

Hamilton, who heads the Biomedical and Environmental Assessment Group (BEAG) in the Analytical Sciences Division of the Department of Applied Science (DAS), will be introduced by Victor Bond of the Medical Department, who originally brought Hamilton to BNL.

As a physician primarily concerned with protecting human health, Hamilton is particularly interested in ensuring that money is not wasted on lesser remediation problems while greater, real health hazards lack funds. To avoid this, he proposes extremely detailed risk assessment — but of a realistic nature, which differs from the conservative methods now being used.

In his talk, Hamilton will define risk assessment, with a description of standard approaches and how they differ from the realistic approach. Focusing on a pilot study conducted for DOE by BEAG, he will outline an assessment of DOE's Savannah River, Fernald Environmental



Leonard Hamilton

Management Project and Nevada Test Sites, and summarize the problems that were examined.

Hamilton will then discuss two assessments in detail - the release of tritium to the Savanah River, and the

Coming Up

Tonight, at 8:15 p.m. in Berkner Hall, BNL Senior Scientist Garman Harbottle, Chemistry Department, will give a public lecture entitled "Were the Vikings Here First? Evidence From Carbon-14 Dating." The talk is sponsored by the New York State Section of the American Physical Society as part of the 67th Semiannual Symposium being held on site.

A public lecture entitled "The Long-Term Stability of the Solar System" will be given by Scott Tremaine of the University of Toronto, at 5:30 p.m. on Tuesday, October 20, in Berkner Hall. The lecture will be part of the Workshop on the Stability of Particle Motion in Storage Rings to be held at BNL October 19 to 24.

radon released from waste silos at Fernald. He will explain how the group estimated the risk associated with tritium and radon and conclude by summarizing the results of the pilot study at the two facilities.

Leonard Hamilton received his B.A. in 1943 at Balliol College, Oxford University, where he qualified in medicine in 1945 and proceeded to his D.M. in 1951 before receiving a Ph.D. in experimental pathology from Cambridge University in 1952.

(continued on page 2)

Chemistry's Friedlander Honored by German University

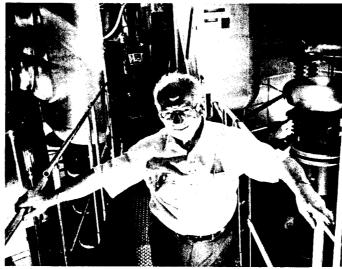
Gerhart Friedlander, a retired senior chemist who is now serving as a consultant to the Chemistry Department, has received his second honorary doctorate degree.

A Doctor of Natural Sciences degree was conferred upon Friedlander by the Johannes Gutenberg University in Mainz, Germany, during a day-long celebration on July 10, to "honor his outstanding scientific work, especially his studies of high-energy nuclear reactions and their interpretation, as well as his contributions to the planning and execution of a large experiment for the detection of solar neutrinos.'

His was the first honorary doctorate that the University of Mainz has awarded a nuclear chemist and the first honorary degree granted a chemist of any kind in the past 14 years.

The citation went on "to acknowledge gratefully the many human and scientific stimuli which the nuclear chemists at Mainz and at other German universities have received from him?

Gerhart Friedlander's association with Gutenberg University began in 1978, when he received a Senior U.S. Scientist Award from Germany's Alexander von Humbolt Foundation to spend nine months at the University's Institute for Nuclear Chemistry (INC). Since 1972, the Foundation has been making these awards to about 75 American scientists per year, to promote the interchange



Gerhart Friedlander, standing before the Cockcroft-Walton for his cluster-fusion experiment.

of ideas between the Americans and German scientists and their respective research institutes.

Under the Foundation's auspices, Friedlander has been back to the University twice since: in 1987, for three months, and for two months this year, during which time he was awarded his honorary degree.

Guenter Herrmann, chemistry professor and INC Director, paid tribute to Friedlander by lauding not only the scientist and his work, but also BNL, as "a research institute that has become a model for others.'

Herrmann went on to say: "Brookhaven was and is not only the place where large facilities are operated and used in an exemplary manner, but also an excellent training ground. . . . [M]any foreigners . . . got their final polish there at a time when our old continent was far behind in nuclear research. Germans, too, were there since the mid-fifties That Brookhaven opened its doors to German postdocs was by no means a matter of course when one considers that among BNL scientists were many immigrants who had been personally affected by the racial laws

(continued on page 2)

First Gertrude S. Goldhaber Prize Presented



Xiaodong Zhang (left), a graduate student in physics at the State University of New York at Stony Brook and a guest junior research associate at BNL, was awarded the first \$500 Gertrude S. Goldhaber Prize in Physics on October 1.

Presented by Brookhaven Women in Science (BWIS), the award honors Gertrude Scharff-Goldhaber (second from right). Now a collaborator in the Physics Department, the noted nuclear physicist was a founding member of BWIS and has long been a champion of education and opportunities for women in science. She was also the first woman Ph.D. to be hired at Brookhaven, when she and her husband, former BNL Director Maurice Goldhaber (right), AUI Distinguished Scientist emeritus, came to the Lab in 1950.

Their son, Alfred Goldhaber (second from left), is with Stony Brook's Physics Department. He presented the award to Zhang just before she gave a seminar on her research in scanning soft x-ray microscopy.

AUI Auctioning Station Wagon

A used station wagon owned by Associated Universities, Inc. (AUI) is being offered for auction to current AUI and BNL employees or retirees, permanent contractor employees with guest numbers or on-site personnel of the U.S. Department of Energy.

The vehicle is a 1985 Ford Crown Victoria station wagon with vehicle identification number 2FABP44F6 FX237568 and 50,100 miles.

The car may be looked at in the parking lot on the northeast corner of Brookhaven Avenue and Center Street, Monday to Friday, October 19-23. from 8:30 a.m. to 5 p.m.

Bidders may not start or drive the vehicle, but it is in good running condition, and its complete maintenance records are in the Transportation Office, Bldg. 179B.

The minimum bid is \$1,650, and bids must be submitted to the BNL Cashier, Bldg. 134, by the end of the day on Friday, October 23. The successful bidder will be notified by Friday, October 30.

Only sealed bids submitted on an official form or photocopy will be considered. For bidding forms, complete auction rules or more information, contact the Transportation Office, Bldg. 179B, Ext. 2535.

Lecture (cont'd)

Hamilton was a scholar of the American Cancer Society from 1953 to 1958 and spent 14 years at the Sloan-Kettering Institute for Cancer Research, working mainly on the molecular structure of DNA and the human immune system.

Hamilton joined BNL in 1964 as a tenured senior scientist to head the Microbiology Division in the Medical Department and be Attending Physician at the Medical Research Hospital. In 1968, he concurrently joined the State University of New York at Stony Brook's Health Sciences Center, as professor of medicine. In 1973, he became head of the Biomedical and Environmental Assessment Division in the then Department of Energy and Environment, but remained with the Medical Department until joining DAS in 1980. He took his present position in 1991.

Since 1983, Hamilton has been the World Health Organization (WHO) Focal Point on Health and Environmental Effects of Energy Systems, and a member of the WHO Expert Advisory Panel on Environmental Hazards. He has often consulted for the United Nations and other institutions.

Hamilton is a member of the American Association for Cancer Research (emeritus), the American Society for Clinical Investigation (emeritus), the gists, Inc., the Harvey Society, the Society for Risk Analysis and the International Society for Environmental Epidemiology. Most recently, he received the Federal Laboratory Consortium Award for Excellence in Technology Transfer in 1990.

After the lecture, all are invited to join the speaker for discussion and refreshments. To join the lecturer for dinner at a restaurant off site, call Arlene Vanslyke, Ext. 2387.

Arrivals & Departures

Arrivals

Claire Fleece......Saf. & Env. Prot. Richard W. Lykins Saf. & Env. Prot. Nancy E. Oeder.....Chemistry

Departures

This list includes all employees who have terminated from the Lab, including retire

,	
Robert J. Gibbs	Accel. Dev
Kurt Jellett	Accel. Dev
Helen J. Kelly	Biology
Chang Su	Chemistry

Waste Minimization — A Real Crusher

The best preventive maintenance that you can do for your car is to change the oil and filter regularly. Regularly, according to automotive experts, means every three months or 3,000 miles, or every 6,000 miles if you follow the recommendation made in most car owner's manuals.

If you drive your car the U.S. average of 12,000-15,000 miles per year, then that means you'll have 15-25 quarts of used motor oil and up to four oil-soaked filters that must be disposed of properly. Since motor oil is recyclable, that is no problem but what about the oil filters?

Due to the oil they retain, used motor-oil filters are classified as hazardous waste and must be disposed of in your town's appropriate facility, not in the regular household garbage that is taken to the dump.

Now multiply your annual two to four oil-filter changes by 346 — the number of government vehicles serviced yearly by the six mechanics in the Automotive Shop Section of BNL's Staff Services Division (SSD). Then add in another 1,600 filters generated by the Friendly Gulf Service Station on site. And factor in the fact that the Lab cannot use Brookhaven Town's hazardous-waste facility, but must dispose of such wastes privately, at great expense.

The sum of some 2,600 used oil filters is the second largest amount of waste generated by SSD. While the sum involved in disposing of oil



Automotive Shop Helper Kirk Dreimann displays the before and after effects of the OTC 1877 crusher on motor-oil filters.

filters as hazardous waste may not be a large fraction of the Lab's total disposal bill, every little bit counts.

So, this February, the Automotive Shop Section purchased an oil-filter press. In one minute, it uses one ton of pressure to squeeze out the residual oil from a filter and reduce the metal cannister to one-fifth its original size.

Collected in a drum below the crusher, the residual oil is then recycled by an outside vendor as a

substitute for heating oil. The crushed filter is then disposed of more easily and less costly as nonhazardous, industrial waste.

The purchase of an oil-filter press in this case an OTC 1877, was originally suggested by Motor Vehicle Maintenance Supervisor Roland "Frenchie" Baillargeon Jr.

His recommendation had been seconded by Project Engineer George Goode, of the Safety & Environmental Protection Division (SEP), during an SEP assessment last January of SSD's compliance with applicable environmental, safety and health regulations. Periodically, reviews the compliance of all other BNL divisions and departments, including Staff Services.

In employing its new filter crusher, Staff Services has not only eliminated one source of hazardous waste, but also reduced the potential volume of its new industrial waste. So, instead of just holding only 150 fullsize filters, one waste drum can now accommodate approximately 750 crushed filters.

The next step, says Goode, who leads the Regulation & Minimization Group within SEP's Hazardous Waste Mangement Section, is to find a contractor who will accept the crushed filters as scrap metal. He explains, "Then everything will be recycled, so there will be nothing to dispose of whatsover."

- Marsha Belford

Suggest an ERC Candidate

This January, three members of the Employee Relations Committee (ERC) will complete their three-year terms — giving the Laboratory Director the opportunity to appoint three new members to this eight-

This is a sensitive task because the ERC handles sensitive matters: It helps non-bargaining, non-scientific employees solve work-related problems that they were unable to resolve with their supervisors. Therefore, new additions to the ERC should be people who are able to hear all sides of an issue objectively and maintain the complete

encouraged to contact his or her department chairman or division head before October 23.

To bring a problem to the ERC's attention, call its special number, Ext. 4005, or contact one of the current members: Michelle Cummings, Bldg. 459, Ext. 2077; Mark Davis, Bldg. 750, Ext. 2760; Richard Eggert, Bldg. 355, Ext. 4834; Veronica Evans, Bldg. 515, Ext. 2851; June Herbert, Bldg. 911B, Ext. 4692; Dennis Klein, Bldg. 725A, Ext. 2743; committee chair William Kollmer Jr., Bldg. 902A, Ext. 4005/4479; and Mary Anne McGrath, Bldg. 197C, Ext. 2815.

person group.

confidentiality under which the ERC operates. Anyone who would like to suggest a candidate for the ERC is

AUI Scholarship Alert

Applications for the 1993 AUI ships can now be obtained from

the Office of Scientific Personnel. Children of regular employees of BNL are eligible to compete for up to 14 AUI scholarships, each for \$2,500 per year renewable for up to four years of study toward an academic degree.

In addition, up to three scholarships may be awarded to BNL and National Radio Astronomy Observatory (NRAO) employees' children who are Black, Hispanic or Native American. One such scholarship is open to qualified children of employees at BNL and another for children of NRAO employees. One may be awarded to an additional applicant from either institution on a competitive basis.

Qualified applicants are the children of BNL employees who begin regular, full-time or regular, eligible part-time employment no later than November 15 of this year and who are employed by BNL at the time the

award is announced: or children of retired employees or employees who died while in regular service at the Laboratory. Stepchildren are eligible if the employee regularly claims the child as a dependent for income tax purposes.

Applicants must also be secondary school seniors who will be graduating during the current academic year and entering college by fall 1993. In addition to filing applications by this November 15, eligible candidates are required to take the Scholastic Aptitude Test, requesting release of their scores to AUI Trustee Scholarships, code number 0442. Students planning to major in the arts or performing arts may also submit a portfolio of their work, of the same file size as the other application materials.

Scholarship winners will be selected by an independent committee reporting to Sponsored Scholarship Programs, an organization within the Educational Testing Service.

For further information, contact the Office of Scientific Personnel, Bldg. 185, Ext. 3336.

Friedlander

(cont'd)

of the Third Reich, and whose family and friends had experienced terrible things. As Herrmann recalled, Friedlander

was born in 1916 "as a Jew in Munich." Since Jews were forbidden to study at German universities, he left for America after his high school graduation in 1935. In 1936, Friedlander enrolled at the University of California, Berkeley, at "the time when Berkeley, with its superior cyclotrons, became preeminent in nuclear chemistry," commented Herrmann. Friedlander completed his dissertation in that field in 1942.

While instructing at the University of Idaho, 1942-43, Friedlander became an American citizen in 1943 and then went on to serve the Manhattan Project at Los Alamos, 1943-

After the war, Friedlander worked as a research associate at the General Electric Research Laboratory, 1946-48, before coming to BNL as a chemist in 1948. Over his years here, he received tenure in 1949, was named Senior Chemist in 1952 and served as Chairman of his department from 1968-77. Friedlander retired in 1981.

From Friedlander's long and influential career, Herrmann elaborated upon three "areas with which [Friedlander's] name is especially associated": First, his work with BNL's Cosmotron, reproducing "in the laboratory the interactions of cosmic rays with atomic nuclei": second. his contributions to the ongoing GALLEX experiment, following up on the historic study of the flux of solar neutrinos arriving on earth, done earlier by BNL's Ray Davis; and, third, the 1949 publication of the first textbook in the nuclear chemistry field, which Friedlander coauthered and has revised three times since.

Following this tribute, Friedlander presented a seminar on his continuing research into cluster fusion, whereby cluster-ion impact apparently induces nuclear fusion at surprisingly low energy.

Among his many other honors, Gerhart Friedlander's first honorary doctorate came in 1991, from Clark University.

Brookhaven Bulletin October 16, 1992

Healthline Lecture Where There's a Will . . .

Returning as a Healthline lecturer for an unprecedented third time, George Roach, Chief Attorney of the Senior Citizen Division of Suffolk County's Legal Aid Society, will present "Update: Money Matters -When Illness Ctrikes.

Sponsored by the Health Promotion Program (HPP) of the Occupational Medicine Clinic, Roach will speak on Tuesday, October 20, from noon to 1 p.m. in Berkner Hall. The BNL community is invited to attend. For those who cannot make the lecture, audiotapes will be available afterwards at the Research Library, Bldg. 477.

Roach will update the audience on how new changes in the Medicaid law affect Medicaid coverage. He will again discuss estate planning, so people may learn how to protect both their own estates and their families' finances in case an expensive terminal illness strikes.

With the Legal Aid Society for the past 13 years, Roach has specialized in legal issues affecting the elderly and poor. He is Chairman of the Elderlaw Committee of the Suffolk County Bar Association and recently received its highest award, the President's Award, for his contributions to the field of continuing legal and public education.

To register, return the bottom portion of the Health Promotion flyer recently mailed to all employees to Health Promotion Specialist Mary Wood, Bldg. 490, by Monday, October 19. Space permitting, registration will be done at the door. For more information about the Healthline lecture series or HPP, call Wood at Ext. 5923.

Volleyball

Volleyball League fees for the new season are \$65 per team, due by noon on Monday, October 19. Send checks, payable to BERA Volleyball, to Gary Smith, Bldg. 911C.

BWIS Invites All To Wine & Cheese

All are invited to Brookhaven Women in Science's (BWIS) Wine & Cheese Party — on Wednesday, October 21, from 4:30 to 6:30 p.m., in the Recreation Building in the apartment area.

This informal get-together is held annually to acquaint employees with BWIS officers and members, and with the group's accomplishments, which have benefited the entire Lab community.

Elected last month, the new BWIS officers are: Eva Emmerich and Veronica Evans, Group Coordinators; Lisa Tranquada, Secretary; Harriet Castro, Treasurer; Anita Cohen, Publicity Chair; Louise Hanson, Seminar-Lecture Chair; Ruth Kempf, Scholarship Chair; Pam Mansfield, Newsletter Editor; Dorry Tooker, Program Chair; and Mary Wood, Membership Chair.



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Social Club

Contact Doris Terry, Ext. 7610, Bldg. 197C, for information or reservations for the following events on the Social Club's calendar:

• Disney's World on Ice -- "Beauty and the Beast," Saturday, 11/21, Nassau Coliseum, 3 p.m., \$15 ea., due 11/2.

• TV's Double Dare Tour — Friday, 11/27, Nassau Coliseum, 7 p.m., \$11 ea.,

• Halloween Murder Mystery Weekend - 10/30-11/1, Holiday Inn at Lake George, round-trip motorcoach, six-hour open bar, costume party, prizes, three meals, more; \$210 ea. 5/rm, \$215 ea. 4/rm., \$220 ea. 3/rm., \$225 ea. 2/rm. Reservations and money due now.

ANS Meeting

Ivan Selin, Chairman of the U.S. Nuclear Regulatory Commission, will be at BNL on Thursday, October 22, to speak about "Future Challenges for the Nuclear Regulatory Commission," at the next meeting of the Long Island Section of the American Nuclear Society (LIANS).

Following a luncheon at 11:30 a.m., Selin will speak in the south dining room of the Brookhaven Center at 1 p.m. For luncheon reservations, call Roz Goldberg, 929-8300, Ext. 3611, by October 20.

Note to Employees:

Attendance at lectures, meetings and other special progams held during normal working hours is subject to supervisory concurrence.

Cafeteria Menu

Luncheons

Monday, October 19	
Soup: Beef rice	.80/1.10
Entree: Cheese ravioli	3.20
Lite choice: Lemon-herbed chicken	3.45
Carvery: Hot pastrami sandwich	2.95
Grill: Halibut steak w/rice pilaf	3.95
Special: Baked potato bonanza	

Tuesday, October 20 .80/1.10Soup: Tomato Entree: Chinese beef & green peppers Lite choice: Pasta primavera 3.20 Carvery: Hot roast beef sandwich 2.95

Grill: Chicken cutlets w/fried potatoes 3.95 Wednesday, October 21 Soup: Chicken noodle .80/1.10Entree: Sweet & sour pork 3.35 Lite choice: Veal Marsala 3.65 Carvery: Hot baked ham sandwich 2.95 Grill: Meatball hero w/fries Special: Cereal & o.j. deal

Thursday, October 22 .80/1.10Soup: Lentil Entree: Eggplant Parmesan Lite choice: Baked chicken w/veg. 3.45 Carvery: Corned beef sandwich 2.95 Grill: Mahi-mahi w/wild rice 3.95

Friday, October 23 Soup: New England clam chowder .80/1.10Entree: Baked herb fish 3.45 Lite choice: Stir-fried beef & broccoli 3.65 Carvery: Turkey sandwich 2.95 Grill: Cajun chicken cutlets 3.95 w/Spanish rice

PE's Best Swingers Come to the Fore

Fun for all was a w-hole-ly fore-gone conclusion in the recently completed second season of the Plant Engineering and Friends golf league, in which fourteen two-person teams competed for top honors. Keeping an eagle eye on the camera birdie are this year's winning teams: (from left) in second place, Mark Culp and Paul Coleman; successful defenders of their last season's victory, first-place winners John DiNicola and Ove Dyling; and third in the league, John Coccorese and Jack Brennan.



Diwali Party

The 1992-93 BERA Concert Series will begin on Monday, October 19, with a recital by the Audubon Quartet, at 8 p.m., in Berkner Hall. The program includes works by Haydn, Brahms and the contemporary comment area, and an informal program poser Peter Schickele. of Indian music may follow.

Bowling

Red/Green League

But for a stubborn ten-pin in the ninth frame. A. Warkentien could have had the first 300 game at BNL in many a year. He had to settle for a 279 game and 638 scratch. R. Raynis bowled a 243/209/632 scratch series, R. Larsen 242/634 scratch series, A. Sauerwald 226, J. Muller 217, R. Mulderig 214, C. Bohnenblusch 209. S. Thompson 209, G. Sorensen 204, A. Pinelli 203, K. Asselta 202/200, T. Prach 202, R. Wiseman 202, K. Riker 201, M. Guacci 200, R. Jansson 200.

Concert Monday

Purple League

Bob Gieb bowled a 243, Ed Beadle 224/209/603 scratch series, Denise Monteleone 210, Joe Sheehan 207, Tracy Ryan 201/170/533 scratch series, John Addessi 186/181, Caryl MacDougall 185/175, Sue Cataldo 180, Ruth Sheehan 187, Key Conkling 177, Sharon Smith 176.

White League

Ray Raynis bowled a 237/569 scratch series, Maryann Reynolds 220/178/567 scratch series, Ken Riker 215, George Munoz 207/181/547 scratch series, Jim Petro 198/190/547 scratch series, Joe Mayeski 197, Sam Logan 187/185, Dennis Klein 184, Larry Musso 182, Pete Wynkoop 180, Lorraine Petro 174, Gerrie Riker

The BERA Indo-American Association is organizing a Diwali party to celebrate the Indian festival of light, on Friday, October 23, at 7 p.m. This potluck dinner party will be held at the Recreation Building in the apart-

To join this gathering, call Ramesh Gupta, 924-8113, evenings, or Anand Saxena, Ext. 4844 or 589-9771, by Saturday, October 17.

Costume Party For Halloween

All employees and family members 18 years and older are invited to a Halloween Costume Party on Saturday, October 31, in the Recreation Building in the apartment area.



Sponsored by the Afro-American Culture Club, the party will begin at 8 p.m., and it will feature music by E.T. and a contest with cash prizes for the most creative and scariest costumes. Food and beverages will be sold.

Tickets are \$5 each and are available from: April Donegain, Ext. 2459; Abass Wessen, Ext. 5276; and Bruce Penn, Ext. 7213.

Calling All Craftmasters!

Craftermasters! There's plenty of time to finish a project — or start one from scratch - for the 6th BERA Craft Show, which will be sponsored by the BERA Art Society at Berkner Hall from December 1 to 4.

Suggested crafts include quilting, original needlework, stained glass, metalsmithing, jewelry, pottery, inlaid wood or tiles, crochet, macrame and weaving. Employees, their family members 15 years and older, retirees and guests of BNL may all contribute. More than one piece may be entered by an exhibitor, to be shown as space permits.

Exhibits for the show will not be collected until Monday, November 30. However, so that a catalog can be made available, please complete two forms for each work that you will enter and return them no later than Monday, November 16, to Robert Chrien, Bldg. 510. More forms are available at the BERA Store at Berkner Hall, and copies are acceptable.

Entry for 6th BERA Craft Show, December 1-4

Return to Robert Chrien, Bldg. 510, by November 16.

Name	_ Phone
Craft	
Space needed	
Vertical or horizontal; table or floor	
BNL contact & phone	

Classified **Advertisements**

Placement Notices

The Laboratory's placement policy is to select the best-qualified candidate for an available position. Consideration is given to candidates in the following order: (1) present employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present employees within the Laboratory; and (3) outside applicants. In keeping with the Affirmative Action plan, selections are made without regard to age, race, color, religion, national origin, sex, handicap or veteral status.

Each week, the Personnel Division lists new placement notices. The purpose of these listings is, first, to give employees an opportunity to request consideration for themselves through Personnel, and, second, for general recruiting under open recruitment. Because of the priority policy stated above, each listing does not necessarily represent an opportunity for all

Except when operational needs require otherwise, positions will be open for one week after

For more information, contact the Employment Manager, Ext. 2882, or call the JOBLINE, Ext. 7744 (282-7744), for a complete listing of all openings.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees.

MK8098. ADMINISTRATIVE/SECRETARIAL POSITION - Will perform broad and diverse secretarial and administrative duties for the Deputy Laboratory Director, and work closely with, support and back up the office of the Laboratory Director. Requires an AAS or equivalent experience, the ability to work under quickly changing priorities, a high degree of judgement and discretion, and excellent verbal and written communication skills. In addition, requires substantial secretarial experience, demonstrated administrative background, and a broad knowledge of Laboratory policies and procedures. Knowledge of shorthand highly desirable. Director's Office.

DD2344. SECRETARIAL POSITION - Requires AAS in secretarial science, previous relevant experience and excellent communication skills. In addition, extensive knowledge of Laboratory policies and procedures as well as word-processing experience required; Wordperfect 5.1 experience desired. Will perform highly skilled and complex secretarial functions, including preparing technical reports, and handling administrative paperwork, correspondence and travel arrangements. (Reposting) Department of Nuclear

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates.

MK6441. SALARY ADMINISTRATION POSITION - Requires a bachelor's degree in a business discipline or related field; substantial professional experience in human resources, including at least four years' in salary administration; excellent writing and editing skills; and skill in developing PC software applications using Lotus 1-2-3, Harvard Graphics and DBase, as well as word processing skills, preferably using WordPerfect. Additional requirements include experience in job documentation, analysis and evaluation, market pricing, salary planning, and conducting salary and benefits surveys. Personnel Division.

DD1074. TECHNICAL POSITIONS - (term appointment) Require AAS in mechanical technology or equivalent experience. Experience in piping and mechanical assembly is highly desirable. Duties will include the fabrication, assembly and operation of cryogenic systems. RHIC Project.

DD1076. TECHNICAL POSITION - (term appointment) Requires AAS or equivalent experience and the ability to work from electrical and/or mechanical blueprints or sketches in building and trouble shooting complex equipment. Experience in leak detection PPA in components and systems, handling cryogens, and using machine and hand tools also required, as are excellent communication and demonstrated organizational skills.

NS1073. ENGINEERING POSITION - Requires BS/MSEE and substantial experience in the design, development and measurement of rf systems, preferrably high-power equipment up to the VHF range. Expertise in the use of analytical computer codes is essential, as is a strong background in accelerator-related rf and beamequipment interaction. Responsibilities include the development of RHIC beam-storage rf systems and related areas. RHIC PROJECT.

LF8156. ENGINEERING POSITION - Requires bachelor's degree in the physical sciences, at least two years' health physics experience, and strong written and oral communication skills, as well as computer skills. Will assist in developing the Lab's new TLD dosimetry system, in support of DOELAP accreditation program. Duties include setting up and checking out the system, calibrations, developing dosimetry algorithms, quality assurance design and preparing operating procedures. Responsibilities also include some current operations, such as preparing and reading of TLDs, generating reports and other computer work. Safety and Environmental Protection Division.

Motor Vehicles & Supplies

92 MITSUBISHI MIRAGE - 6k mi., a/t, p/s, p/b, white, 5-yr. warr., must sell, \$7,900. 924-3553.

91 SUZUKI RM250 DIRT BIKE - excel., extras, \$1,400; '90 utility trailer, 5'x8', sides, rear ramp, \$375. Lois, Ext. 4904 or 929-4753 after 6 p.m.

90 MITSUBISHI ECLIPSE - 5-spd., ac, new brakes, belts, runs well, body in excel. cond., well maint., asking \$6,700. Jim, Ext. 5439.

89 FORD F150 PICKUP - 302, V-8, 4-spd., p/s, p/b, 70k mi., \$6,700. 878-4177.

89 PONTIAC GRAN PRIX - 2-dr., gray, a/t, ac, 60k mi., \$6,500 firm. Pat, Ext. 2539.

89 PLYMOUTH SUNDANCE RS - 18k mi., a/t, ac, p/s, p/b, sunroof, p/w, p/l, am/fm cass., fog, excel. cond., \$6,500. Eric, Ext. 5875.

88 PLYMOUTH VOYAGER LE - 3L, V-6, all extras, clean, best offer over NADA book average tradein value. Connie, Ext. 2594 or 727-1483.

88 883 SPORTSTER MOTORCYCLE - nicely set up, \$4,300. 369-4624 after 5:30 p.m.

88 CHRYSLER LEBARON GTS - 38k mi., p/sunroof, ac, p/l, p/s, leather, am/fm cass., mint, \$6,000. Ray, Ext. 7313 or 325-2145.

87 CADILLAC BROUGHAM - 4-dr., 33k mi., \$7,000. 286-0466.

87 CHRYSLER LEBARON - 75k mi., a/t, ac, p/s, cruise, am/fm stereo cass., new battery, \$3,800. Masaki, Ext. 2609/5627.

86 JEEP WAGONEER LTD - p/everything, 2.8L, V-6, a/t, 110k mi., 4wd, ac, cruise, excel. cond., \$5,225. Henry, Ext. 5214 or 7:27-7227.

86 CHEVY CHEVETTE - new brakes, tires, starter, red, moving, good cond., \$1,200. 286-9426.

86 BUICK SKYHAWK - 2-dr., black, m/t, p/s, p/b, ac, am/fm stereo cass., new battery, 73k mi., \$2,150. Mike, Ext. 3981.

86 NISSAN MAXIMA GXE - 62.5k mi., two-tone brown, p/sunroof, \$5,995. Bill, Ext. 2047 or 878-3305 after 6 p.m.

86 VW QUANTUM - a/t, 4-dr., full power, new tires & muffler, 79k mi., excel. cond., asking \$3,500. Allison, 744-2867.

85 PONTIAC GRAND AM - red, ac, sunroof, am/fm stereo cass. rec., 103k mi., v.g. cond., must see, \$1,950 neg. Nathan, Ext. 3571 or 341-1062.

85 CHEVY MONTE CARLO - 2-dr., V-6, a/t, ac, p/b, runs well, good body, \$2,400. Ext. 4558 or 325-0013.

85 FORD LTD CROWN VICTORIA - excel. cond., \$2,700. Jacob, Ext. 4528 or 341-1024

84 HONDA ASPENCADE GOLD-WING 1100 GL am/fm, intercom, 58k mi., extras, mint cond. Rich, 929-0953, leave message.

82 PONTIAC J 2000 - 4-dr., a/t, cruise, 32 mpg, all power, sunroof, tilt, ac, am/fm cass., runs, looks good, \$1,100 or best offer. 929-8443.

82 TOYOTA SUPRA - 5-spd., white/black, p/w, p/l, sunroof, mirrors, perform. pkg., auto climate control, \$2,100. Brian, Ext. 3102 or 349-1279.

82 TOYOTA - h/b, good tires, needs work, \$200. Kathy, Ext. 2267 or 395-6520.

81 TOYOTA TERCEL - 2-dr. n/b, 5-spd., m/t, one owner, runs well, high mi., \$550. Nick, Ext. 3205

80 CHEVETTE - 2-dr. h/b, a/t, ac, fm stereo tape, new brakes, M/S tires, good cond., \$500. George, Ext. 3061 or 751-0265.

80 SUZUKI RS 175 - motor rebuilt, needs work, runs, asking \$90. Phil, 286-1348.

79 CHEVY BLAZER 4x4 - a/t, ac, all power, lift kit, runs well, \$1,700. Ext. 2716.

77 TOYOTA CELICA GT - 5-spd., good commuter car, new tires, shocks, runs well, \$600 or best offer. Tony, Ext. 5349 or 732-1813.

74 CAMARO - yellow, black vinyl top, 400 eng., new rims & tires, am/fm stereo, good cond., \$2,200 neg. Kevin, 289-3560.

74 OLDSMOBILE CUTLASS - V-8, 350, a/t, new trans., brakes, runs, good body, \$1,200 neg. 744-

70 DODGE SWINGER - 2-dr., '81 slant-six eng., a/t, left front damage, good running cond., \$350. Frank, 473-3364.

70 PONTIAC CATALINA - 2-dr., hardtop, a/t, p/b, p/s, 350, V-8, orig. owner, mint, \$2,500. Fred, Ext. 4798 or 289-4798.

69 DODGE DART - clean, good running cond., family owned since new, \$800 neg. Ext. 2949 or 427-2435.

TIRES - two P20575R14 snows, \$30; two P2056HR15, Goodyear, Eagle GT, \$25; 4'x8' trailer, heavy-duty, \$70. Ken, 331-1841.

LADDER RACK - for full-size pickup, \$100; am/fm cass., Panasonic stereo, \$50. Ext. 2716.

RIMS - 4 w/hubcaps, new cond., for 4-lug Ford/ Mercury cars, \$60. Gregg, Ext. 4446 or 874-8631.

RAMP - 6,500-lb. capacity, new cond., 9" wide, 9' lift, heavy-duty steel, used 8 hrs., no rust, cost \$28, now \$20. 475-7257.

TIRES - BF Goodrich, a/t, radials, 33x12.5x15 on deep dish rims w/4x4 center caps, nuts w/locks. excel. cond., \$700/set of 4. Joann, 472-6742.

TIRES - 4, steel-belted, 165SR15, Sears Road Handler on VW rims, hardly used, \$100. John, Ext. 4570 or 751-2655.

CAP - A.R.E., alum. w/ladder rack, side-opening door w/tool bins, rear-opening glass door, black, Mazda, etc., excel. cond. Mike, Ext. 3981.

ROOF RACK - Yakima, used 5 times, for small or med. car w/rain gutters, new \$110, sell for \$70. Siggy, Ext. 4360.

SLIDE-ON CAMPER - sink, stove, refrig., heater, sleeps 4, \$350 or best offer. Ed, 399-5701

Boats & Marine Supplies

19' THUNDERBIRD - 1972, fg, Bowrider, 1975 135-h.p. Evinrude, runs well, must sell, \$900 neg. 288-9086

18' SEASPRITE BOWRIDER - 1985, 1986 150-h.p. Suzuki o.b., s.s. prop., Shoreline trailer, gar., no bottom paint, \$5,000. Bob, Ext. 2023 or 744-3289. LOBSTER POTS - 2, wood, never used, \$24 ea. John, Ext. 2769.

Furnishings & Appliances

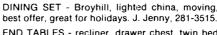
BEDROOM SET - girl's, white, twin bed frame, dresser, mirror, desk, \$150, Queen Anne dining room, cherry, \$300. Jean, Ext. 4938.

BEDROOM SET - walnut, \$150, Colonial sleeper sofa, \$300; wicker fan chair, \$30; server, \$50; 5 stools, \$10 ea.; side table, \$20, 588-6417.

CLOCK - chime, Howard Miller, Westminster, excel. cond., retail, \$255, ask. \$99. 473-7667.

SECTIONAL COUCH - 3 pieces, dark brown, good for playroom, \$50; freezer chest, 5 cu. ft., \$50. Reneé, Ext. 3316.

The Brookhaven Bulletin is printed on paper containing at least 50 percent recycled materials, with 10 percent post-consumer waste.



best offer, great for holidays. J. Jenny, 281-3515. END TABLES - recliner, drawer chest, twin bed w/frame & headboard, rowing machine, vanity table. Sue, Ext. 7235.

FOLDING DOOR - 7 sections, new, still in box, make offer. Al, Ext. 7699.

HUTCH - county pine, new, \$400; sectional sofa, 7 pieces, dusty rose, good cond., \$500. 744-3842. KEROSENE HEATERS - two, excel. cond., \$50. Ext. 2343 or 563-2889.

LIVING ROOM - sofa bed, love seat, glass/brass tables, mint, \$890. Doug, Ext. 4661 or 281-4541. LIVING ROOM - sect., cream w/rust, matching end table, tan velour swivel rocker chairs, all

LIVING ROOM - sleeper sofa, matching swivel rocker, ottoman, recliner, good cond., rustic colors, \$150 for set. Noreen, 878-6921.

excel. cond., ask. \$325. Eileen, 289-3560.

LIVING ROOM SET - rattan couch, loveseat & chair, excel., \$600; 2 chairs, rattan tan cushion, good, \$150. Joann, 472-6742.

MICROWAVE - full-size w/cart, \$75; sofa, loveseat, contemp., excel. cond., \$200. Mary, 281-

SLOW COOKER - 3 qt. & recipe book, \$6; elec. frypan, & recipe book, \$8; Sunbeam elec. knife, \$8. 369-9876.

SWIVEL CHAIRS - rattan, 2 w/cushions, \$150, Formica dressers, 6 & 3 drawer, \$150. H. Martin,

TABLE LAMPS - 2, white glass,, \$20 ea. Joe, Ext.

WASHING MACHINE - G.E., 8 yrs. old, needs parts, \$25. 929-5584.

Tools, House & Garden

BLOWER - Giant Vac, 5 h.p., pneumatic wheels, push-type, good for lawns & parking lots, \$300. John, Ext. 5211 or 732-7568.

BLOWER VAC - gas, new 32cc, 170 mph, gutter attachment, \$125. 588-6917 after 4 p.m.

CEDAR SIDING - clear, horizontal 8" wide, random lengths, 2,000 lf, 40¢/LF. Ray, Ext. 7313

or 325-2145 COMPOSTER - soil, Garden Supply Co., still in box, retail \$99, ask,. \$45, 473-7667.

CORD WOOD - you pick up, \$85 a cord, seasoned hardwood, 3 cords left, 878-6637.

COMPRESSOR - 1/2 h.p. motor, 160 psi tank, old but good, on wheels, \$70. 588-6417 after 4 p.m.

FIREWOOD - seasoned oak. J. Scesny, 732-2849. JOINTER - planer, 4", almost new, make offer. AI, Ext. 7699.

LADDER - 32' alum., \$50; 40' alum. ladder, \$30; 12 lb. outboard, \$150; Speedqueen washer,

stainless tub, \$50; G.E. dryer, \$50. Ken, 331-1841. LEAF VACUUM - Billy Goat, 5 h.p., Ig. capacity bag, vacuum hose attch., excel. cond., \$400. John,

Ext. 5211 or 732-7568. MAPLE TREES - Japanese red, \$10-\$45+; Sears riding tractor, 12 h.p., 4' deck, snow blower, battery start, trailer. Mauro, 265-6542 after 6 p.m. RADIAL SAW - Sears, 10", cost \$428, ask. \$225,

like new. 726-7741 after 6 p.m. SCREEN DOOR FRAME - 3' sliding, aluminum, needs screen, \$40. John, Ext. 7623.

STOVE- wood & coal, 60 Btu, self feeder, ask. \$300. Bob, Ext. 7238.

TOPSOIL - fine screened, delivered, 5 yd. min., \$20/yd. 696-6011, leave message.

WATER FILTER - AquaAid w/spare charcoal cart., \$20; Micromet #6 feeder, \$10; lawnsweeper, Parkes 30", \$50. Ellie, Ext. 3395 or 325-1537.

WOOD STOVE - Sears 48,000 Btu forced-air furnace, wood, \$100; cast-iron stove, \$30. Ken,

Audio, Video & Computer

ANTIQUE RECORDS - good cond., 78 speed & some 33, all early 1900s. Ext. 2384 or 924-8558. CD PLAYER - Technics SL-P406C, 6 disc

cartridge, hardly used, \$100. Rick, Ext. 3932. CD PLAYER - Sony CP-C705, 2-20 kHz, 5-disc carousel, 8x oversampling, 18 bit D/A fade, peak search, \$235. Hans, Ext. 4584 cr 981-3365.

COMPUTER - DEC Professional 350, printer LA-

50, HP plotter, software incl. term. emulator, Fortran comp., system/parts. Al, Ext. 7699. COMPUTER - Atari, also 10 games, 2 controllers,

2 paddles, \$25. Adam, 751-1474. COMPUTER - Mac SE, 20 meg. HD, extended keyboard, 31/2" floppy drive, mouse, literature,

software, games, \$400. Vito, Ext. 4547. ENTERTAINMENT CABINET - Col. maple w/record player & radio, 6'x3'x2', \$150; tape deck,

stereo cassette, etc., sell \$75, 744-3842. ORGAN - Wurlitzer 4060, needs some work, ask. \$75. Phil, 286-1348.

SHAREWARE - Charnuc chart of the nuclides, n-109 for DOS computers, need VGA graphics, \$10. Ralph, Ext. 2180.

STEREO - am/fm, phone, 8 track, cass., speakers, make offer. Janet, Ext. 2345.

TV - 44" projection, new, cost \$2,200 now, \$875; microwave table w/drawers, on rollers, tan, \$100. Donna, 579-8708. TELEVISION - portable 12", b/w, good picture.

VCR TAPES - Maxell GP, new, \$3 ea. or 2 for \$5; 360k diskettes, 25/pk, \$6; 2.8 enlarging lens, \$75. Susan, Ext. 7647.

Sports, Hobbies & Pets

Kathy, Ext. 2267 or 395-6520.

BICYCLE - boy's BMX, like new, never used, \$100 flexible. Adam, 751-1474.

BOWLING BALL - Brunswick Pearl, 12 lbs., undrilled, \$15; leather jacket, white, size 7, \$10. Ext. 2733 or 878-8491.

CABINET - Sportsman Nimrod, hold 7, walnut finish, glass doors, \$60. 475-7257.

CAMERA - Pentax 1000 35mm w/adjustable focus & carry case, excel. cond., \$150. Kathy, Ext. 2267 or 345-6520.

Attn: Retirees

Next month, the Bulletin will publish the annual Special Edition updating retirees' names and addresses, just in time for the holiday

We'd also like to include some "retirement notes," your messages, stories or reminiscences that are of interest to the entire BNL community.

To share your retirement note, send it to the Brookhaven Bulletin, Bldg. 134, Brookhaven National Laboratory, Upton, NY 11973. To be considered for publication, your note must be received by Friday, November 6. Submittals may be edited and will be published as space permits.

COMPOUND BOW - Bear Mag hunter supreme, 4-pin sight, 7-arrow quiver, 1 yr. old, \$95. Bob, 369-4624 after 5:30 p.m.

EXERCISE VIDEOS - Denise Austin, hips, thighs, buttocks, stretch, pregnancy low-fat diet, step, more, \$14-\$24 ea. 399-1868.

FERRETS - 3 cute, timid, mild, 1 cinnamon, 2 mask, great w/kids, cage, access., need a good home. Ext. 2384 or 924-8558.

GERMAN SHEPHERD - 3 yrs. old, AKC, good temperament, loves people. 727-7741.

GOLF CLUBS - complete set, excel. cond., bag & pull cart incl., \$125. Tony, 587-9375. HORSE TRAILER - 1987 Kingston 2-horse, extra

wide, bus window, less than 2,000 miles, mint cond., in/out, \$3,250. Joe, 277-8590. POOL COVER - 18'x36' solar, used one week,

like new, \$75. Harry, Ext. 5976. POOL TABLE - 8', good cond., \$75. Mary, 281-

ROWER - Sears best, \$75. 331-7917.

GUITAR EQUIPMENT - GK250RL, \$150; NADY 201 wireless system, \$200. Doug, Ext. 4661 or 281-4541.

SKIS - package 175 Atomics, Look bindings, poles, 3 seasons, skis, good cond., bindings, excel. cond., ask. \$100. Matt, 744-7406.

SOCCER CLEATS - brand new, size 5, young man's. 878-1178.

Miscellaneous

ANTIQUE TYPEWRITER - still works, all back w/white lettering on keys, same type used in commercial for Hard Copy. 924-8558.

BABY'S CLOTHES - \$5 or less, good cond., snowsuit, jackets, dresses, Oshkosh overalls, & more. Mary, 924-6235.

COPY MACHINE - Savon B35 w/all chemicals, \$500. Kathy, Ext. 2267 or 395-6520.

CURTAINS - white w/small blue flowers, 2 ea. 42x86, 54" valance, 2 tiebacks, \$12. Mary, 924-

ELECTRONIC-CORRESPONDENCE COURSE complete, prepare for license to repair radios & TVs, \$25. Ext. 2343 or 563-2889. GLOBE HANGING LAMP -three, \$20; 13" b/w TV,

\$20; coffee pot, \$20, copper watering can, \$20, child's stroller, \$25. Kathy, 744-2203. METAL BOX - w/key, 4"dx11"lx71/2"w, \$8; keepsake hutch box kit, 51/2"x10X, \$3. Susan, Ext. 7647.

bracelet, 14k gold, link, new, ask. \$95. Linda, Ext. GYMPAC 5000 - \$150; shampoo sink, chair, dryer, station w/mirrors, \$100. Kathy, Ext. 2267 or 395-

RING - CZ 2ct./side stones, 14k, ask. \$125; new

SHOES - woman's ProWalker, \$40, suede Keds, flats, \$20, size 81/2 M, worn once. 751-3062.

WOMEN'S COATS - size 12, down, beige, knee length, \$25; gray, knee-length, \$10; purple jacket, thigh-length, \$7. Mary, 924-6235.

Free

AWNING - 10'x10' alum., you take down. Bob,

CAT - black tortoise, 4 yrs. old, spayed, completely declawed, litter home. Vic, Ext. 7016 or 543-7674.

CLIPPINGS - thorn blackberry and raspberry.

KITTENS - 4 light gray & white, ready to be picked up now, litter box-trained. Joe, 399-4169.

Wanted

CHILD'S BICYCLE - for 9-yr.-old boy. Z. Zhao, Ext. 4331

CLOTHES DRYER - working condition. Dannie, Ext. 4581 or 929-3859.

COMPUTER STAND/DESK - 874-2614.

DESK - w/drawers for high school student. Dave,

HOUSE - 3-4 bdrm., for visiting scientist until Sept. 93, must be in SWR SD. Brian, Ext. 2369. HOUSE - 30 min. to Lab, 2-3 bdrm., good school

RECORDS - LPs and/or 45s, polka of any year, rock & roll, 1955-65. Frank, Ext. 3120.

TRAINS - Lionel & American Flyer & accessories. top \$ paid. Bruce, 924-4097 after 5.

In Appreciation

district. Ext. 7192.

Hurricane Andrew was devastating. Thanks for -The Durcan Family. being there.

Ads left out of this issue due to lack of space need not be resubmitted to appear in the next issue.